

What is claimed is:

1. A current control apparatus for fluorescent lamps adopted
for used on a fluorescent lamp actuated by a high voltage to
maintain an even current in the fluorescent lamps comprising
5 a high frequency pulse modulator to obtain a feedback signal
from a signal processor to output a pulse width modulation
(PWM) resonant frequency signal to modulate a power switch
to output an actuation signal which is transformed by a
conversion unit to actuate a piezoelectric transformer,
10 wherein:

the fluorescent lamp is divided to a positive phase fluorescent
lamp and an inverted phase fluorescent lamp, the positive phase
fluorescent lamp outputting a first current signal and the negative
phase fluorescent lamp outputting a second current signal, the first
15 current signal being at the positive half cycle while the second
current signal being at the negative half cycle, the signal processor
processing the first current signal at the positive half cycle and
generating a current compensation signal to the high frequency
pulse modulator which outputs a resonant frequency to control
20 current variation of the fluorescent lamp; the first current signal
being at the negative half cycle while the second current signal
being at the positive half cycle, and the signal processor
processing the second current signal at the positive half cycle and
generating another current compensation signal to the high
25 frequency pulse modulator which outputs another resonant

frequency to control the current variation of the fluorescent lamps.

2. The current control apparatus of claim 1, wherein the fluorescent lamp is a cold cathode fluorescent lamp.

3. The current control apparatus of claim 1, wherein the
5 conversion unit is an inductor.

4. The current control apparatus of claim 1, wherein the signal processor is a differential rectification circuit.

5. The current control apparatus of claim 1, wherein the signal processor is full-wave rectification circuit.

10 6. The current control apparatus of claim 1, wherein the current compensation signal is a full-wave rectification signal.

7. The current control apparatus of claim 1, wherein the positive half cycle and the negative half cycle have a phase angle difference of 180 degrees.